Appl. No.: 10/033,715
Amdt. Dated: 12/19/2005
NOA Dated: 11/10/2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented): A multilayer light emitting device, comprising:

a polysilicon electron emitting layer;

an amorphous insulating layer over the electron emitting layer; and

a direct bandgap light emitting layer over the insulating layer;

wherein electrons emitted from the electron emitting layer pass through the insulating layer and into the light emitting layer and are converted into bandgap radiation by the light emitting layer; and

wherein said electron emitting layer is formed with asperities that promote field emission of electrons into the insulating layer.

2. (canceled)

3. (original): A light emitting device as recited in claim 1, wherein said insulating layer comprises SiO_2.

4. (original): A light emitting device as recited in claim 1, wherein said light emitting layer comprises GaInP.

5. (original): A light emitting device as recited in claim 1, wherein said insulating layer and said electron emitting layer comprise in combination an oxidized polysilicon layer.

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6. (currently amended): A multilayer light emitting device, comprising:

a polysilicon layer;

an oxide layer over said polysilicon layer; and

a direct bandgap light emitting layer over said oxide layer[[,]];

wherein electrons emitted from the polysilicon layer are converted into bandgap radiation by the light emitting layer; and

wherein said polysilicon layer is formed with asperities that promote field emission of electrons into the oxide layer.

7. (original): A light emitting device as recited in claim 6, wherein said light emitting layer comprises GaInP.

8. (previously presented): A multilayer light emitting device, comprising:

a polysilicon layer;

an oxide layer over said polysilicon layer; and

a GaInP layer over said oxide layer;

wherein said polysilicon layer is formed with asperities that promote field emission of electrons into the oxide layer.

9. (previously presented): A light emitting device as recited in claim 8, wherein electrons emitted from the polysilicon layer are converted into bandgap radiation by the GaInP layer.

10. (previously presented): A multilayer light emitting device, comprising:

a polysilicon layer;

an oxide layer over said polysilicon layer; and

a direct bandgap semiconductor layer over said oxide layer;

wherein said polysilicon layer is formed with asperities that promote field emission of electrons into the oxide layer.

11. (currently amended): A light emitting device as recited in claim 10, wherein electrons emitted from the ~~oxidized~~ polysilicon layer are converted into bandgap radiation by the direct bandgap layer.

12. (original): A light emitting device as recited in claim 11, wherein said direct bandgap layer comprises GaInP.

Claims 13-15 (canceled)

16. (previously presented): A light emitting panel comprising a plurality of devices as recited in claim 1, 6, 8, or 10 arranged in a mosaic array.

17. (previously presented): A method for generating light emission in a multilayer light emitting device, comprising:

injecting electrons from a polysilicon electron emitting layer through an insulating layer and into a direct bandgap light emitting layer where said electrons are converted into to bandgap radiation;

wherein said electron emitting layer comprises a material formed with asperities that promote field emission of electrons into said insulating layer.

18. (canceled)

19. (original): A method as recited in claim 17, wherein said insulating layer comprises SiO_2.

20. (original): A method as recited in claim 17, wherein said light emitting layer comprises GaInP.

21. (original): A method as recited in claim 17, wherein said insulating layer and said electron emitting layer comprise in combination an oxidized polysilicon layer.

22. (currently amended): A method for generating light emission in a multilayer light emitting device, comprising:

injecting electrons from a polysilicon layer though an oxide layer and into a direct bandgap light emitting layer where said electrons are converted into [[a]] bandgap radiation;

wherein said polysilicon layer is formed with asperities that promote field emission of electrons into the oxide layer.

23. (original): A method as recited in claim 22, wherein said light emitting layer comprises GaInP.

24. (previously presented): A method for generating light emission in a multilayer light emitting device, comprising:

injecting electrons from a polysilicon layer through an oxide layer and into a GaInP layer where said electrons are converted into bandgap radiation;

wherein said polysilicon layer is formed with asperities that promote field emission of electrons into the oxide layer.

25. (previously presented): A method for generating light emission in a multilayer light emitting device, comprising:

injecting electrons from a polysilicon layer through an oxide layer and into a direct bandgap semiconductor layer where said electrons are converted into bandgap radiation;

wherein said polysilicon layer is formed with asperities that promote field emission of electrons into said oxide layer.

26. (original): A method as recited in claim 25, wherein said direct bandgap layer comprises GaInP.

27. (previously presented): A method for generating light emission in a multilayer light emitting device, comprising:

injecting electrons from a polysilicon electron emitting layer into a GaInP layer where said electrons are converted into bandgap radiation;

wherein said polysilicon layer is formed with asperities that promote field emission of electrons into the oxide layer.

28. (canceled)